




Substance Abuse and Mental Health Services Administration
SAMHSA
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20
1992-2012
YEARS STRONG




DEPARTMENT OF HEALTH & HUMAN SERVICES
USA

Behavioral Health is Essential To Health



Prevention Works





Treatment is Effective

People Recover





SAMHSA-HRSA CENTER for INTEGRATED HEALTH SOLUTIONS

Latest Developments in the Field



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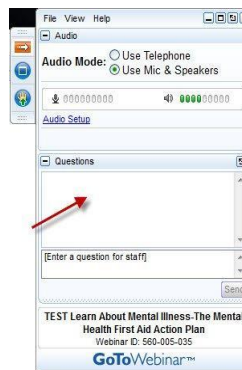
Slides for today's webinar are available on the CIHS website at:

<http://www.integration.samhsa.gov/mai-coc-grantees-online-community/webinars>

3



How to ask a question during the webinar



If you are listening to this webinar from your computer speakers, please type your questions into the question box and we will address your questions. **(right)**

THIS WEBINAR IS BEING RECORDED

4



Learning Objectives

- Examine recent advances in HIV prevention and treatment
- Examine recent advances in hepatitis prevention and treatment
- Review the challenges of the opioid epidemic on HIV and hepatitis prevention and treatment services

5

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Advances in HIV Treatment & Prevention **DRUGS:** Faster, Safer, Newer

William Connors, M.D.
Positive Impact Health Centers, GA
SAMHSA MAI-CoC Webinar - Dec 20, 2016



7

FASTER: Rapid Antiretroviral (ART) Start

ART now recommended for all, but how soon?

- Significant personal & Public Health benefits of ART
- NHAS 2020 = 'linked to care' in **1 month** (prev. 3 months) →
What is 'linked'? What about ART start?

Rapid Entry / Same-Day ART

- Preliminary African & US studies = Safe & Effective
- Why not ... Adherence? Resistance? Retention?
- Benefits = Direct, In-Direct
- Challenges = Resources, Costs, Co-ordination

8

SAFER: Opioids, Syringes, & HIV

Injection opioid use & HIV = Powder Keg

- Alarming national PWID trend & HIV stats
 - ~1:10 new HIV = PWID → overall downward trend but...
 - More heroin use among younger whites who share needles
- Scott County, Indiana case-study = “**entirely preventable**”

Syringe Services Programs

- Comprehensive, community-based
 - Equipment | Disposal | Referral | Testing | Prevention
- Effective but under-utilized
- Essential **part** of comprehensive services

Vaccines
PrEP / PEP
Condoms
Naloxone

9

Advise, Collaborate, Advocate

NEWER: Integrase Inhibitors

Integrase Strand Transfer Inhibitors (InSTI) (“-tegravir”)

- ARV’s for all, InSTI = first line regimens (IAS-USA, DHHS)
- Improved outcomes vs. Protease Inhibitor & NNRTI regimens

Fewer drug interactions

- Dolutegravir/**Abacavir**/Lamivudine + methadone = ↓methadone
- Elvitegravir/**cobicistat**/Emtricitabine/Tenofovir + SSRI = ↑SSRI

Fewer side-effect...

- Relatively new class, emerging data on neuro-psych. effects?
- German & Dutch studies = discontinuation in 6 – 14% of patients
 - Sleep disturbance > psychiatric
 - More frequent: Females, >60 yrs, & Dolutegravir

10

References & Resources

Rapid ART Start

- Rosen S, et al. Initiating Antiretroviral Therapy for HIV at a Patient's First Clinic Visit: The RapiT Randomized Controlled Trial. PLoS Med. 2016;13(5):e1002015
- Pilcher CD, et al. The Effect of Same-Day Observed Initiation of Antiretroviral Therapy on HIV Viral Load and Treatment Outcomes in a US Public Health Setting. JAIDS. 2017;74(1):44-51

Syringe Service Programs

- Wejnert C, et al. Vital Signs: Trends in HIV Diagnoses, Risk Behaviors, and Prevention Among Persons Who Inject Drugs - United States. MMWR. 2016;65(47):1336-42.
- Janowicz DM. HIV Transmission and Injection Drug Use: Lessons From the Indiana Outbreak. Topics in antiviral medicine. 2016;24(2):90-2.
- CDC. HIV & Injection Drug Use: Syringe Services Programs for HIV Prevention. @ <https://www.cdc.gov/vitalsigns/hiv-drug-use/index.html>
- Peters PJ, et al. HIV Infection Linked to Injection Use of Oxymorphone in Indiana, 2014-2015. NEJM. 2016;375(3):229-39.

Integrase Strand Transfer Inhibitors

- IAS-US 2016 Recommendations: Gunthard et al. JAMA. 2016;316(2):191-210. @ <http://jamanetwork.com/journals/jama/fullarticle/2533073#isc160011b5>
- DHHS Guidelines: Use of Antiretroviral Agents in HIV-1-Infected Adults and Adolescents @ <http://aidsinfo.nih.gov/guidelines>
- Van den Berk G, et al. Abstract 948, Conference on Retroviruses and Opportunistic Infections, Boston, Massachusetts, February 22-25, 2016.
- Hoffmann C, et al. Higher rates of neuropsychiatric adverse events leading to dolutegravir discontinuation in women and older patients. HIV Med. 2017;18(1):56-63.



11

Questions?

Enter your questions into the Questions
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discussion

45




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Advances in Care: Opioid and hepatitis C virus (HCV) epidemic

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December 20, 2016

Opioids and Hepatitis

- The webinar will focus on the latest developments in these treatment fields:
 - Review the challenge of the opioid epidemic in the U.S., how it is impacting prevention and treatment services, and steps that can be taken for overdose prevention, and
 - Advances in the prevention and treatment of hepatitis.

Current Opioids, Heroin Epidemic

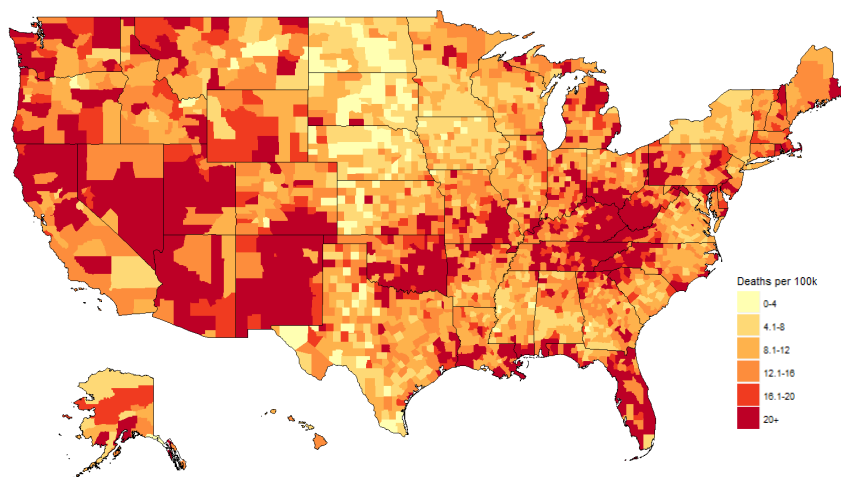
- More Americans now die every year from drug overdoses than they do in motor vehicle crashes.
- New data from the Centers for Disease Control and Prevention (CDC) show that opioids—a class of drugs that include prescription pain medications and heroin—were involved in 28,648 deaths in 2014.
- Health care providers wrote 259 million prescriptions for opioid pain medications in 2012, enough for every American adult to have a bottle of pills.

15



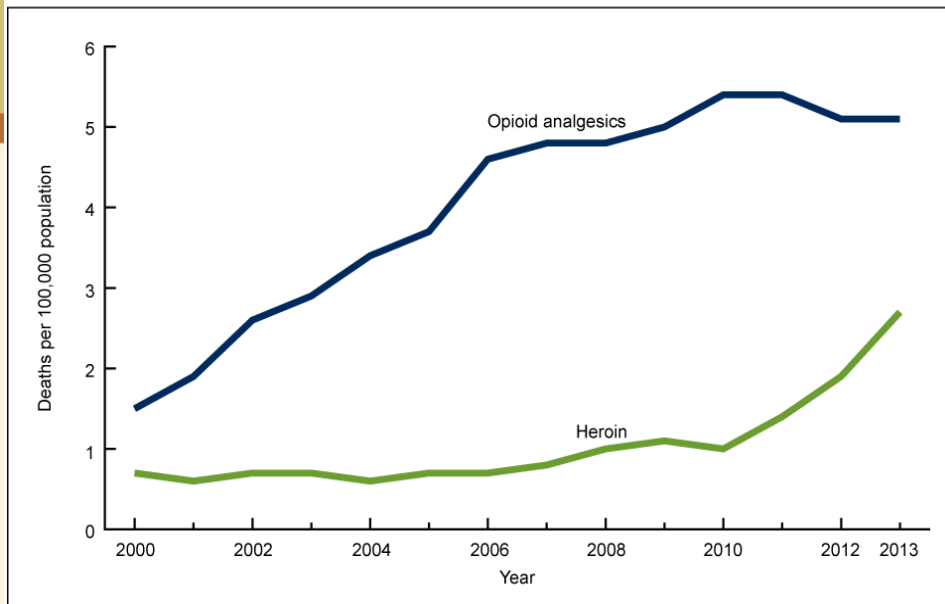
The Growing Drug Overdose Epidemic

2014



16

Figure 1. Age-adjusted rates for drug-poisoning deaths, by type of drug: United States, 2000–2013



NOTES: The number of drug-poisoning deaths in 2013 was 43,982, the number of drug-poisoning deaths involving opioid analgesics was 16,235, and the number of drug-poisoning deaths involving heroin was 8,257. A small subset of 1,342 deaths involved both opioid analgesics and heroin. Deaths involving both opioid analgesics and heroin are included in both the rate of deaths involving opioid analgesics and the rate of deaths involving heroin. Access data table for Figure 1 at: http://www.cdc.gov/nchs/data/databriefs/db190_table.pdf#1.
SOURCE: CDC/NCHS, National Vital Statistics System, Mortality.

Methadone



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18

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Suboxone: The Best of Both Worlds?

Buprenorphine	Suboxone	Naloxone
-Partial opioid AGONIST	-Can satisfy heroin cravings	-Opioid ANTAGONIST
-Can mimic some of heroin's effects	-No euphoric "high"	-Blocks heroin's actions
-Can satisfy heroin cravings	-Less habit-forming than full opioid agonists such as heroin or methadone	-Eliminates risk of opioid overdose
-No euphoric "high"	-Less respiratory depression compared to methadone	
-Less habit-forming than full opioid agonists such as heroin or methadone	-Low risk of overdose	
-Less respiratory depression compared to methadone		

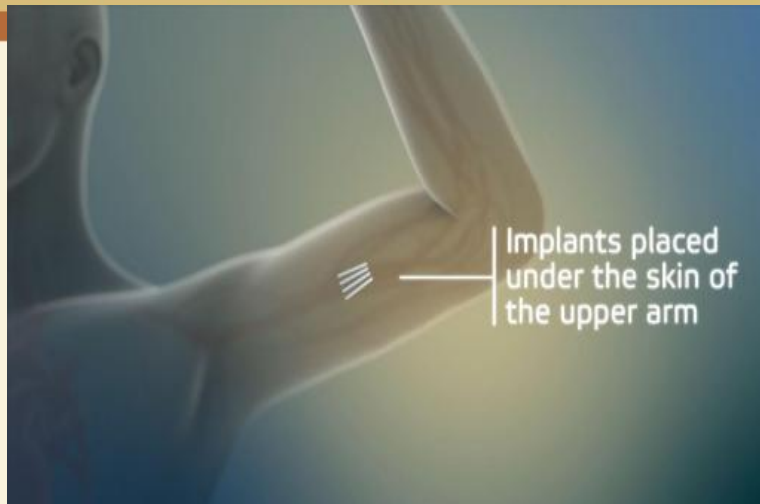
19

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FDA approves first buprenorphine implant for opioid dependence

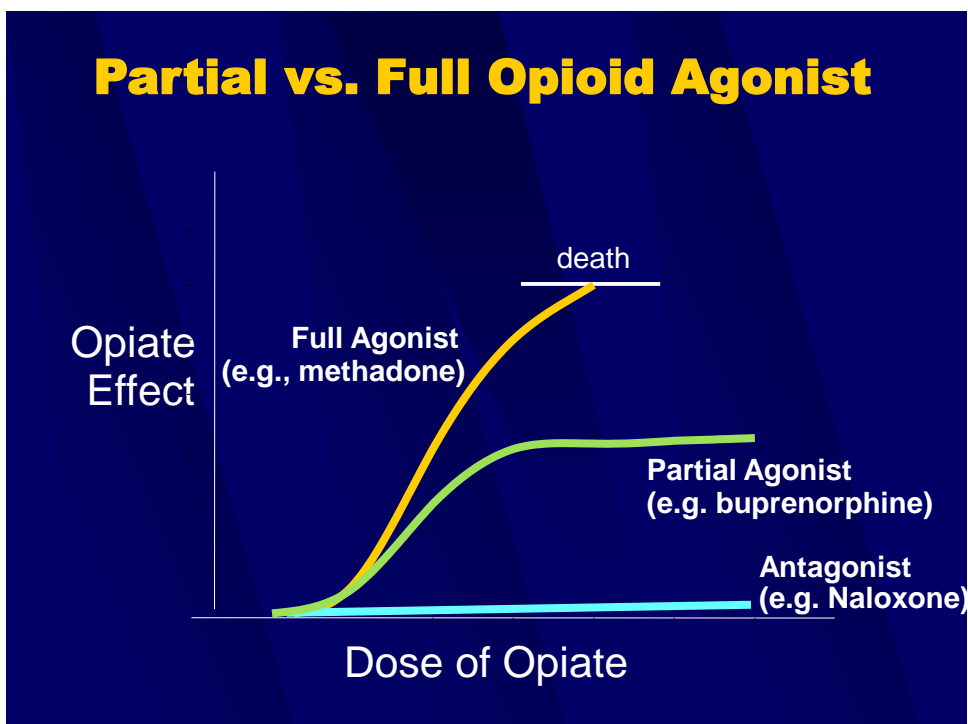
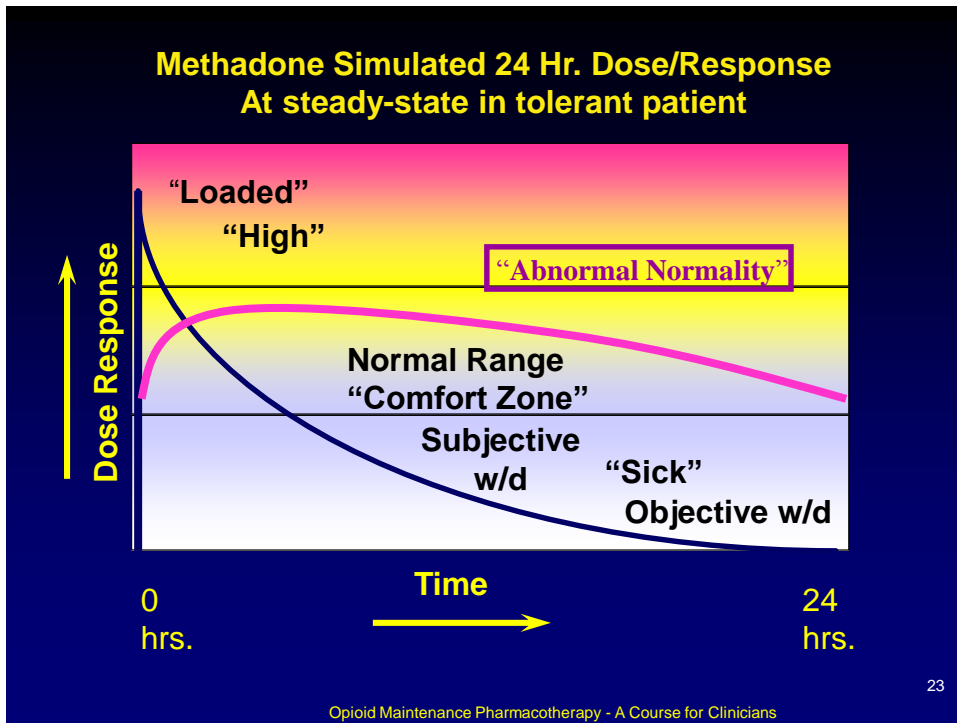
- Probuphine implant lasts for six months and has been approved as part of a complete treatment program.
- Probuphine consists of four, one-inch-long rods that are implanted under the skin in the upper arm.
- The treatment has been approved for use in patients who are already stable on low-to-moderate doses of other forms of buprenorphine (8mg or less a day) as part of a complete treatment program that includes counselling and psychosocial support.

20



21





Co-occurring needs for care...

- People using drugs illicitly often have other complex health and social needs, including other substance misuse, and preexisting or concurrent mental disorders.

24



Treatment of Substance Use and Mental Disorders to Prevent Infectious Diseases

- In general, a short detoxification program from opioids has limited success in leading persons who use drugs illicitly to abstain from such use (211,212).
- For persons who use drugs illicitly, a longer program for substance abuse treatment that includes medication-assisted therapy (e.g., methadone or buprenorphine) and behavioral interventions is helpful for treating illicit drug use as well as for preventing HIV infection, viral hepatitis, STDs, and TB (116,204–210,213–217).
- Reducing or eliminating illicit drug use through substance abuse treatment promotes an overall healthy lifestyle and reduces other negative consequences of illicit drug use, including overdose (218).

<https://www.cdc.gov/mmwr/preview/mmwrhtml/rr6105a1.htm>

25



SAMHSA Initiatives to Prevent Opioid Overdoses and Overdose Deaths

- SAMHSA has developed an ***Opioid Overdose Toolkit***, which consists of five separate booklets, each designed for a specific audience:
 - Booklet 1, ***Facts for Community Members***, helps local governments, community organizations and private citizens develop sound policies and practices to help prevent opioid-related overdoses and deaths.
 - Booklet 2, ***Five Essential Steps for First Responders***, includes steps for paramedics, EMTs, police, and other helpers to use in responding to an overdose, including how to use naloxone.

SOURCE: Opioid Overdose Prevention Toolkit - Updated 2016. <http://store.samhsa.gov/product/Opioid-Overdose-Prevention-Toolkit-Updated-2016/SMA16-4742>

26

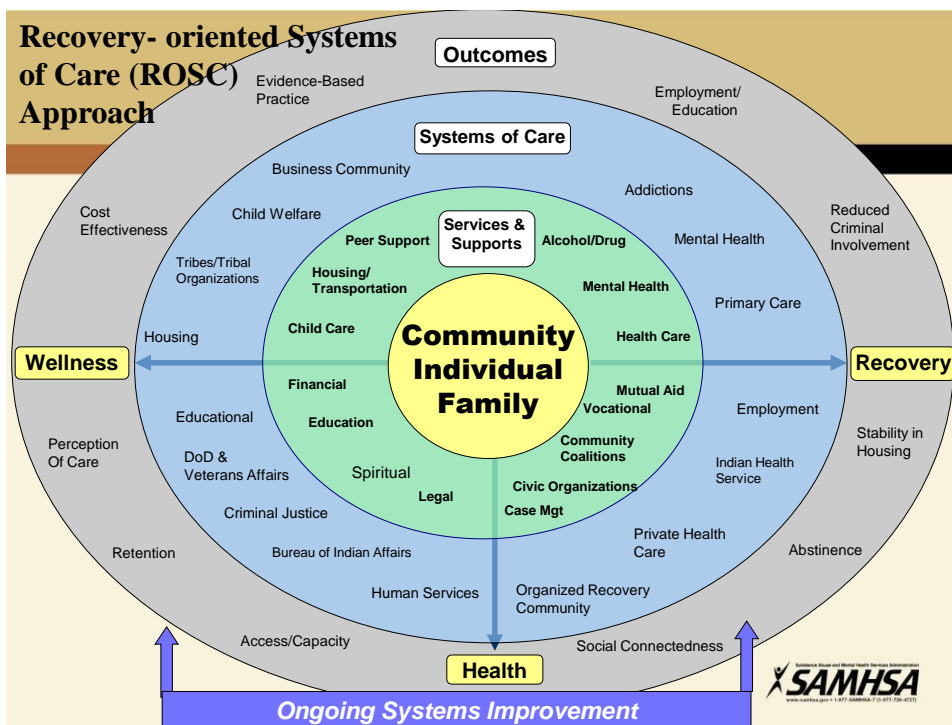


- Booklet 3, ***Information for Prescribers***, physicians and other health care professionals will read about the risks of opioid overdose, as well as clinically sound strategies for prescribing opioids and educating and monitoring patients so as to minimize the risk of an overdose.
- Booklet 4, ***Safety Advice for Patients***, empowers patients by helping them understand how to use opioid medications safely.
- Booklet 5, ***Recovering from Opioid Overdose***, provides resources for overdose survivors and family members to help them recover from the trauma of overdose and become advocates for prevention.

SOURCE: Opioid Overdose Prevention Toolkit - Updated 2016. <http://store.samhsa.gov/product/Opioid-Overdose-Prevention-Toolkit-Updated-2016/SMA16-4742>

27





Resources

- **Integrated Prevention Services for HIV Infection, Viral Hepatitis, Sexually Transmitted Diseases, and Tuberculosis for Persons Who Use Drugs Illicitly: Summary Guidance from CDC and the U.S. Department of Health and Human Services.**
<https://www.cdc.gov/mmwr/preview/mmwrhtml/rr6105a1.htm>
- **Opioid Overdose Prevention Toolkit - Updated 2016.**
<http://store.samhsa.gov/product/Opioid-Overdose-Prevention-Toolkit-Updated-2016/SMA16-4742>

Hepatitis C Virus

30



Hepatitis C Virus

- Approximately 2.5 to 4 million people are infected with hepatitis C virus (HCV) in the United States (SAMHSA, 2014).
- Baby boomers (those born between 1945-1965) and persons with mental health and substance use disorders face an increased risk for infection.
- Among people who have used or currently use intravenous drugs, one in three young adults and three in four older adults are HCV-infected (CDC, 2014).

31



Hepatitis C Virus

- Dramatic medical advances in the past year have revolutionized the course of HCV treatment, increasing the role of primary care and behavioral health settings in addressing this public health concern.

32



HCV Current Initiative

http://attcnetwork.org/projects/HCV_Home.aspx

- HCV Current is a national initiative among the ATTC Regional Centers to **increase hepatitis C (HCV) knowledge** among medical and behavioral health professionals, especially staff at **federally qualified health centers**.

33



HCV Facts

<http://hepcchallenge.org/hcv-facts/>

- The Hepatitis C Crisis — it is the most common, chronic blood-borne viral infection in the U.S.
- At least [130 – 150 million](#) people worldwide have chronic HCV. [6 – 8 million](#) Americans are living with hepatitis C.
- [350,000 – 500,000](#) people die each year from hepatitis C-related liver diseases, around [17,000](#) in the US.
- At least [half](#) of infected individuals are unaware of their status.
- Up to [85 percent](#) of people infected with HCV will develop chronic infection.
- As many as [30 percent](#) of infected individuals will develop cirrhosis, a serious liver condition.

34



HCV Facts

<http://hepcchallenge.org/hcv-facts/>

- Up to [5 percent](#) of people with HCV develop liver cancer, the [2nd leading cause](#) of cancer death worldwide and one of the [fastest rising](#) cancer killers in the US.
- Without significant intervention, the HCV epidemic will cost the American public more than [\\$85 billion](#) in the next few years.
- There is no vaccine for HCV.
- There is a simple blood test for HCV—early detection helps halt spread of the disease and saves lives.
- New therapies for HCV are tantamount to a cure in most infected individuals with the virus and are extremely safe and tolerable to most patients.

35



- **ALMOST HALF** of new hepatitis C cases in the U.S. are associated with injection drug use.
- Baby boomers (born 1945 - 1965) and persons with mental health and substance use disorders face **INCREASED RISK OF INFECTION**.
- **EMERGING EPIDEMIC** of hepatitis C infection among young people who use intravenous drugs, both male and female, primarily white, found in suburban and rural settings.

36



Transmission of Viral Infections

HIV

- **Injection drugs:**
Contaminated needles, syringes, cooker, cotton
- **Sexually:**
Blood, semen (pre-seminal fluid), vaginal secretions
- **Perinatally:**
From HIV-infected mother to newborn
- **Other infectious body fluid:** breast milk

HBV

- **Injection drugs:**
Contaminated needles, syringes, cooker, cotton
- **Sexually:**
Blood, semen, vaginal secretions
- **Perinatally:**
From HBV-infected mother to newborn
- **Household contact:**
Sharing razor, toothbrush, nail clipper
- **Open sores**

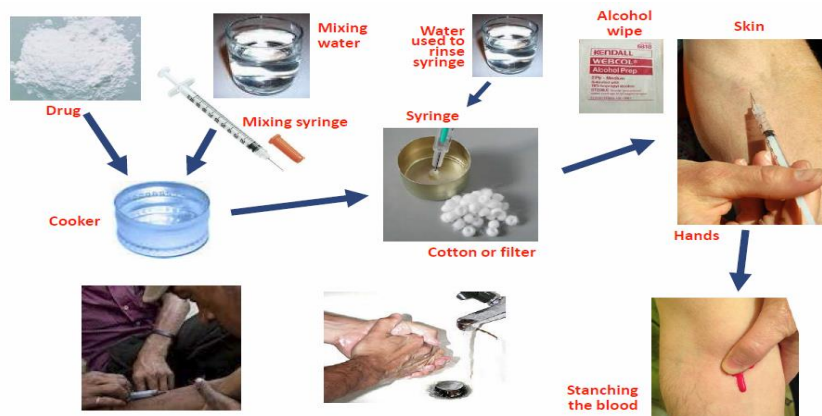
HCV

- **Injection drugs:**
Contaminated needles, syringes, cooker, cotton
- **Sexually:**
Traumatic sexual exposure
- **Perinatally:**
From HCV-infected mother to newborn

37



Opportunities for Blood Borne virus Transmission During Injection Drug Use



39

Risk Based Recommendations for HCV Testing

- Persons who have ever injected illegal drugs, including those who injected only once many years ago, ever shared needles and works.
- All persons born between 1945 – 1965.
- All persons with HIV infection.
- Persons presenting with symptoms of hepatitis, or elevated enzyme levels.
- Received transfusion or blood products before 1992.
- Received clotting factor prior to 1987.
- Ever on hemodialysis.
- Healthcare, emergency, public safety workers after exposures to HCV through infected blood.
- Children >1 year born to HCV-positive women.
- Tattoo and/or body piercing done while incarcerated or by an unlicensed artist.

39

Other Factors Associated with Elevated Risk

- Low income
- History of homelessness
- History of incarceration
- History of mental health
- Communities of color
- Birth in an endemic region
- Other factors (heavy alcohol use, non-injected drug use, multiple sex partners, diabetes)



SOURCES: Edlin, B.R., & Winkelstein, E.R. (2014). Can hepatitis C be eradicated in the United States? *Antiviral Research*, 110, 79-93; Coffin, P.O., et al. (2012). Cost-effectiveness and population outcomes of general population screening for hepatitis C. *Clin Infect Dis*, 54(9), 1259-1271.

40



HCV Treatments & Timeline

2011

Victrelis (boceprevir) in combination with peginterferon alfa and ribavirin, for the treatment of genotype 1 (treatment naïve, experienced, with compensated or decompensated cirrhosis)

Incivek (telaprevir) in combination with peginterferon alfa and ribavirin for the treatment of genotype 1 (treatment naïve, experienced, with compensated or decompensated cirrhosis)

2002

Pegasys (peginterferon alfa-2a) for the treatment of chronic HCV as part of a combination therapy

Copegatus. (ribavirin) in combination with Pegasys in patients 5 years of age and older (with compensated liver disease that were not previously treated with interferon alpha as well as in adults coinfected with HIV)

2001

Pegintron (peginterferon alfa-2b) injections for treatment of chronic HCV patients with compensated liver disease

1998

Rebetol (ribavirin) to be used in combination with interferon alfa-2b (both pegylated and non-pegylated) injections for the treatment of chronic hepatitis c in patients 3 years of age and older with compensated liver disease.

41

Source: Hepatitis Central, Medications to Treat Hepatitis C – A Timeline
<http://www.hepatitiscentral.com/medications-to-treat-hepatitis-c-a-timeline>



HCV Treatments & Timeline

2016

Epclusa (sofosbuvir/velpatasvir) first all-oral, single tablet regimen for adults with genotypes 1-6 (*without cirrhosis, compensated or decompensated cirrhosis*)

Zepatier (elbasvir and grazoprevir) with or without ribavirin for patients with genotypes 1 and 4 (*treatment naïve without cirrhosis, compensated or decompensated cirrhosis*)

2015

Daklinza (daclatasvir), for use with sofosbuvir and first 12-week, all-oral treatment for patients with genotype 3

Technivie (ombitasvir, paritaprevir and ritonavir) is used in combination with ribavirin for the treatment of patients with genotype 4 that do not have scarring and poor liver function (cirrhosis)

Harvoni (ledipasvir/sofosbuvir) **FIRST** once-daily pill that doesn't require interferon or ribavirin, treatment option for patients with genotype 1

Viekira Pak (ombitasvir/paritaprevir/ritonavir and dasabuvir) oral combination therapy for the treatment of patients with genotype 1 (*with compensated cirrhosis*)

Olysio (simeprevir) capsules in combination with peginterferon alfa and ribavirin or with sofosbuvir, in treatment naïve patients with genotype 1

2014

2013

Sovaldi (sofosbuvir) tablets to be used in combination with ribavirin or with pegylated interferon and ribavirin. for patients with genotypes 1, 2, 3 or 4

42

Source: Hepatitis Central, Medications to Treat Hepatitis C – A Timeline
<http://www.hepatitiscentral.com/medications-to-treat-hepatitis-c-a-timeline>



HCV Treatment Update Sites

- **Hepatitis C New Drug Research And Liver Health** Approved Treatments For Hepatitis C
<http://hepatitiscnewdrugresearch.com/approved-treatments-for-hepatitis-c.html>
- **HCV Guidance: Recommendations for Testing, Managing, and Treating Hepatitis C** <http://www.hcvguidelines.org>
- **Hepatitis C Treatment & Management**
<http://emedicine.medscape.com/article/177792-treatment>

43



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44



Questions?

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45

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Next Webinar

Tuesday, January 24, 2017

Sustaining Progress 1: Developing, Assessing, and Evaluating Strategic Goals

46

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MAI-CoC Onsite Trainings

- Motivational Interviewing
- Using GPRA/TRAC Data for Program Sustainability
- Trauma-Informed Care
- Whole Health Action Management
- SBIRT
- Integrated Practice Assessment Tool (IPAT) Consultation and Planning
- Medication Assisted Treatment 101
- Achieving Cultural Competence in Behavioral Health and HIV Service Delivery
- Case Management to Care Management Training
- Mastering Supervision
- Staff Wellness

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47

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